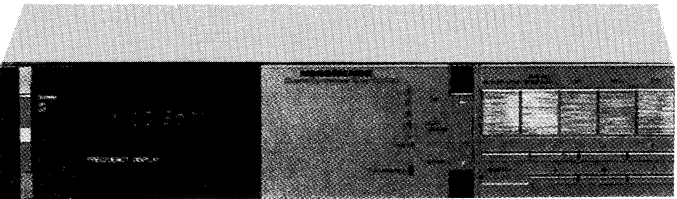
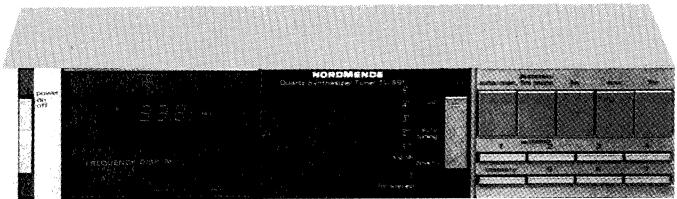


TECHNISCHER KUNDENDIENST

Service-Information



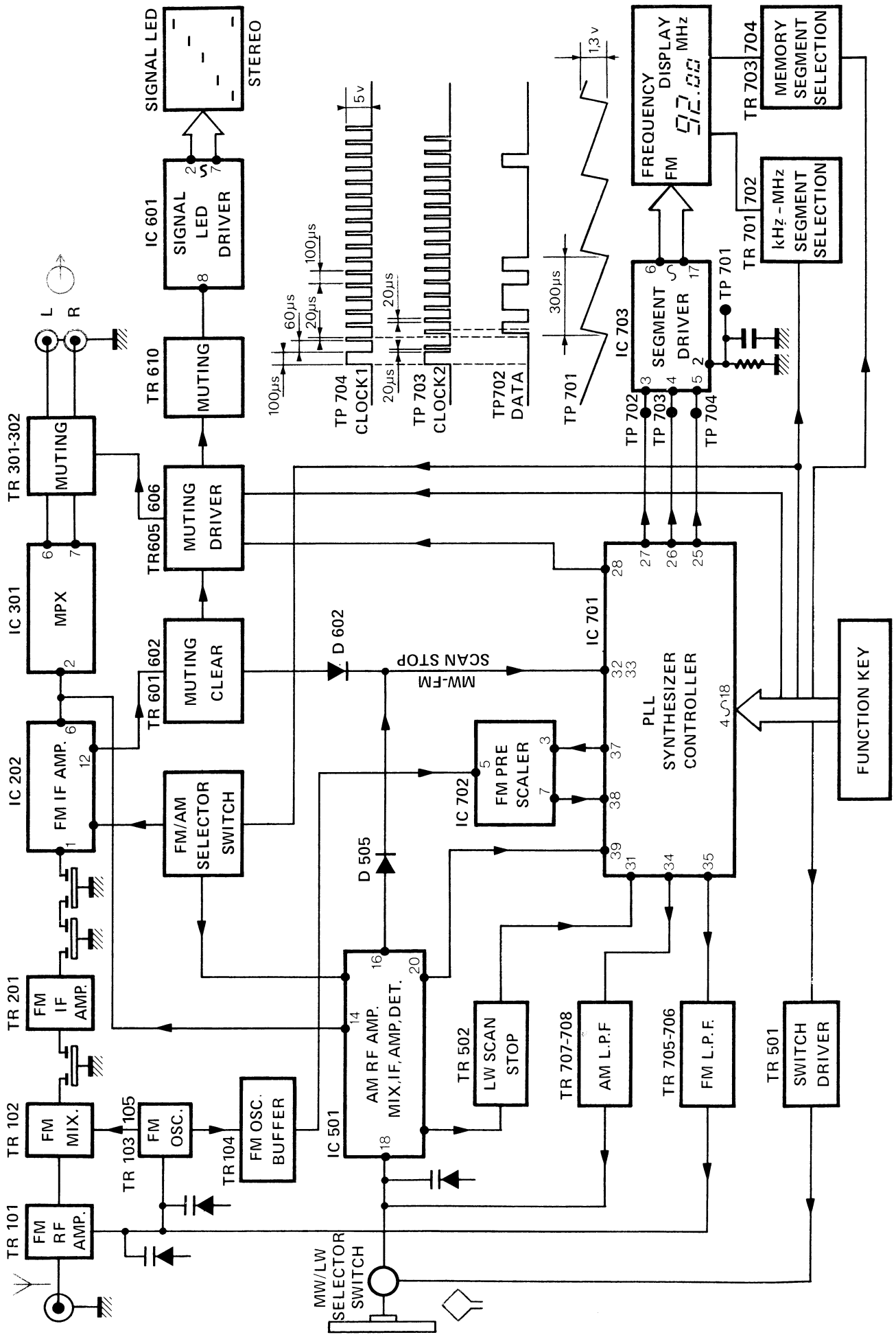
Tuner TU 990 984.152 H

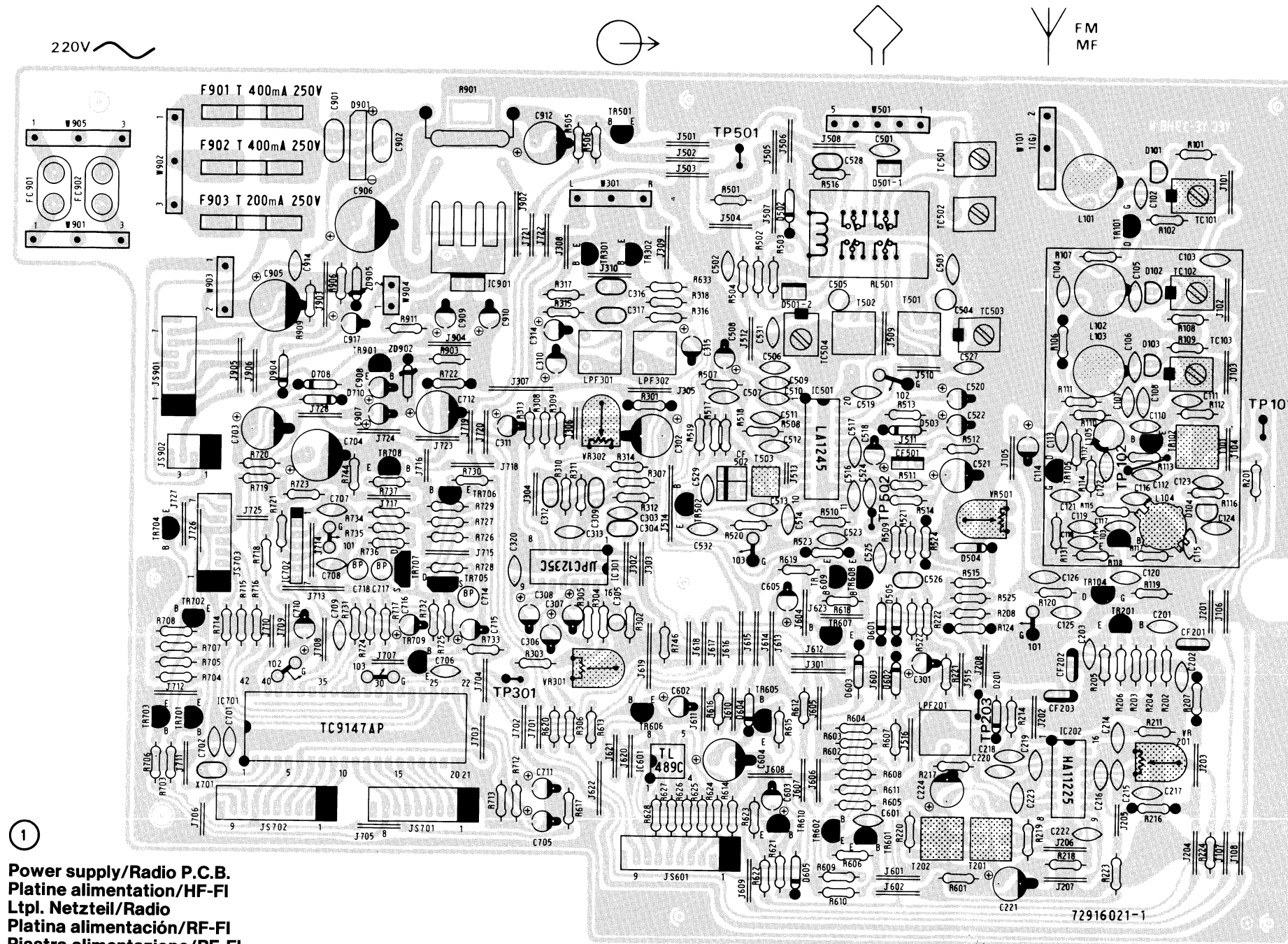


Tuner TU 991 984.154 H

Technical data · Caractéristiques principales · Technische Daten Características del aparato · Dati tecnici			
Type of set : 3 band synthesizer tuner Type d'appareil : Récepteur de radiodiffusion à synthétiseur Geräteart : Tuner, 3 Wellenbereiche mit Synthesizer Tipo de aparato : Sintonizador estereofónico con sintetizador Tipo d'apparecchio : Radioricevitore 3 gamme d'onda con sintetizzatore			
Power supply and consumption : Alimentation et consommation : Stromversorgung und Leistungsaufnahme : 220 V ~ 8 W Alimentación y consumo : Alimentazione i consumo :	FM-MF : 87,5 - 108 MHz FM-IF : 10,7 MHz MW-PO : 522 - 1 611 kHz LW-GO : 153 - 360 kHz AM-IF : 450 kHz		
Sensitivity : FM-MF mono : 0,8 µV (S/N = 26 dB, ± 40 kHz) Sensibilité : FM-MF stereo : 30 µV (S/N = 46 dB, ± 40 kHz) Eingangsempfindlichkeit : FM-MF stereo : 30 µV (S/N = 46 dB, ± 40 kHz) Sensibilidad : MW-PO : 250 µV/m (S/N = 20 dB) Sensibilita : LW-GO : 600 µV/m (S/N = 20 dB)	Selectivity : FM-MF : 65 dB (± 300 kHz) Sélectivité : FM-MF : 65 dB (± 300 kHz) Trennschärfe : AM-MA : 40 dB (± 9 kHz) Selectividad : AM-MA : 40 dB (± 9 kHz) Selettività : AM-MA : 40 dB (± 9 kHz)		
Total harmonic distortion : Distorsion harmonique : FM-MF : 0,15% Klirrfaktor : AM-MA : 1,5% Distorsión armonica : Distorsione armonica :	Frequency response : FM-MF : 20 Hz - 15 kHz Courbe de réponse : FM-MF : 20 Hz - 15 kHz Frequenzgang : MW-PO : 50 Hz - 2,5 kHz Curva de respuesta : LW-GO : 50 Hz - 1,5 kHz Curva di riposta :		
Stereo separation : Diaphonie : Übersprechdämpfung : 40 dB f = 1 kHz Diafonia : Diafonia :	S/N ratio : 70 dB (40 kHz - 1 mV) Rapport S/B : 70 dB (40 kHz - 1 mV) Geräuschspannungsabstand : 70 dB (40 kHz - 1 mV) Relación señal/ ruido : 70 dB (40 kHz - 1 mV) Rapporto segnale/disturbo :		

NORDMENDE

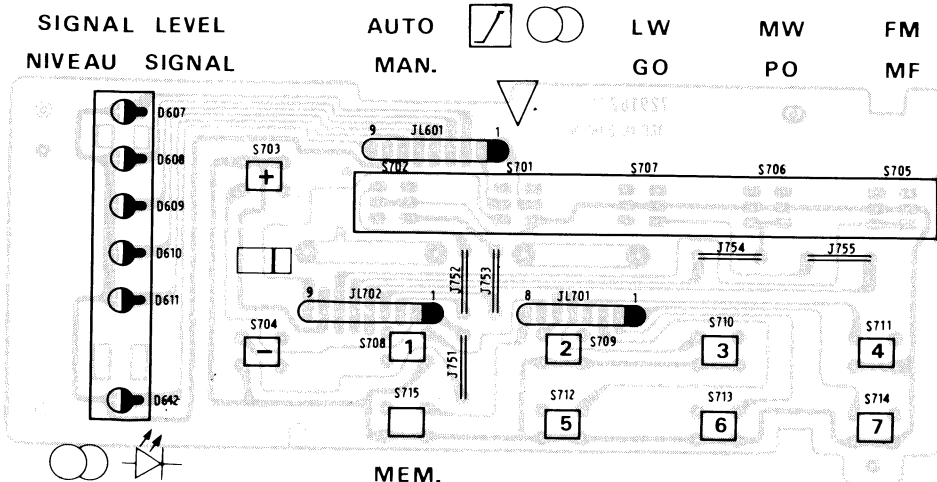




1

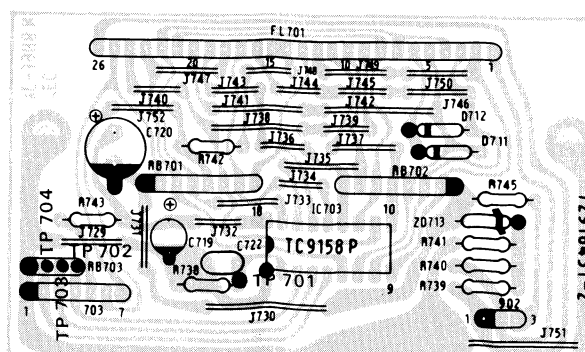
Power supply/Radio P.C.B.
Platine alimentation/HF-FI
Ltpl. Netzteil/Radio
Platina alimentación/RF-FI
Piastra alimentazione/RF-FI

2
P.C.B. Pretuning
Platine présélection
Ltpl. Festsendereinstellung
Platina preselección
Piastra di preselezione

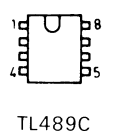
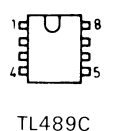
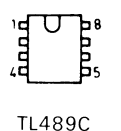
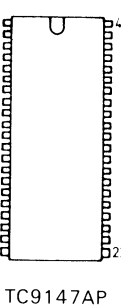
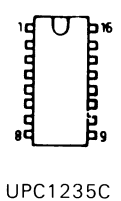
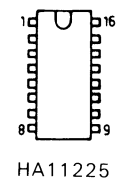
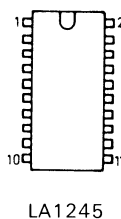
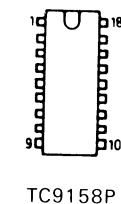


3

Frequency Display P.C.B.
Platine afficheur
Ltpl. Frequenzsyntheseanzeige
Platina indicador de Frecuencia
Piastra indicatore di Frequenza



Component side
Côté composants
Bestückungsseite
Lado componentes
Lato componenti

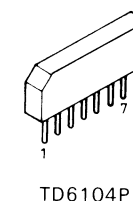


1	0	10	FM.MWO,2 LW - 4.5
2	2.5	11	FM.MWO,2 LW - 9.3
3	0	12	FMO,2 MW - 14.3 LW - 4.5
4	0	13	FM.LW - 15.3 MW - 15.6
5	0	14	FM.LW - 15.3 MW - 15.6
6	FM - 4.6 MW - 9.5 LW - 9.3	15	FM.LW - 15.3 MW - 15.6
7	FM - 9.2 MW - 14.3 LW - 4.5	16	FM.LW - 15.3 MW - 15.6
8	FM - 9.2 AM - 14.2	17	FM.LW - 15.3 MW - 15.6
9	FM4.8 MW - 14.4 LW - 4.5	18	5.1

1	MW2,6 LW4	11	0.7
2	MW2,3 LW2,2	12	0
3	2.8	13	3
4	0	14	10.1
5	MW9,2 LW8,9	15	1.4
6	2.1	16	MW8,7 LW7,6
7	9.4	17	MW3 LW2,9
8	9.4	18	5.5
9	2.8	19	5.5
10	MW7,8 LW7,9	20	2.7

1	FM1,9 AM2,6	9	5.6
2	FM1,9 AM3,1	10	5.6
3	FM1,9 AM2,6	11	FM10,6 AM10,9
4	0	12	FMO,2 AM4,9
5	-	13	FM3,8 AM0,2
6	5.6	14	0
7	FM5,6 AM6,4	15	-
8	5.6	16	3.4

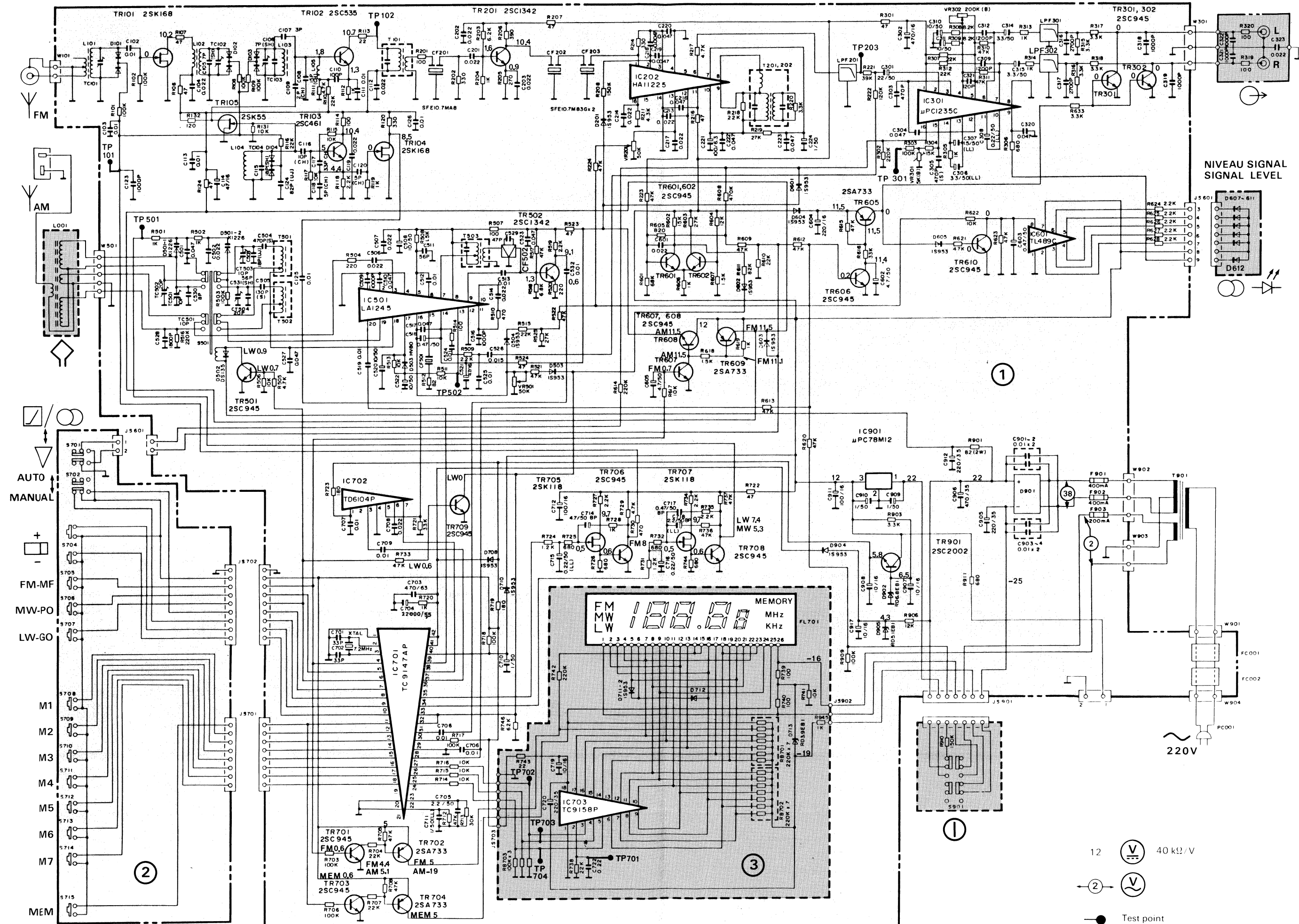
1	10,9	9	FM10,1 AM10,8
2	2,4	10	2,4
3	5,2	11	2,4
4	8,8	12	2,4
5	8,8	13	2,4
6	4,4	14	2,4
7	4,4	15	FM3,2 AM 0,3
8	0	16	FMO,2 AM10,2





















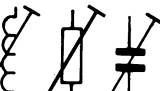



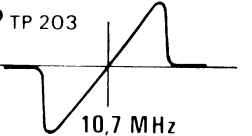







1	5
2	-
3	FM3,9 AM4,2
4	0
5	3,4
6	3,5
7	FM2,9 AM0



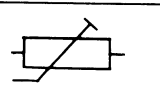



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2	2,1	12	0	22	0	32	FM4,4 MW4,7	42	5,2
3	2,1	13	0	23	0	33	FM4,4 MW4,7		
4	FM4,6 AM0	14	0	24	-	34	0,5		
5	FM.LWO MW4,8	15	0	25	0	35	0,5		
6	FM.MWO LW4,6	16	0	26	0	36	-		
7	FM 5 AM 5,1	17	0	27	0	37	FM2,1 AM5		
8	0	18	0	28	0	38	FM2,8 AM0		
9	0	19	-	29	0	39	FM5 AM2,1		
10	0	20	0	30	5,1	40	5,1		



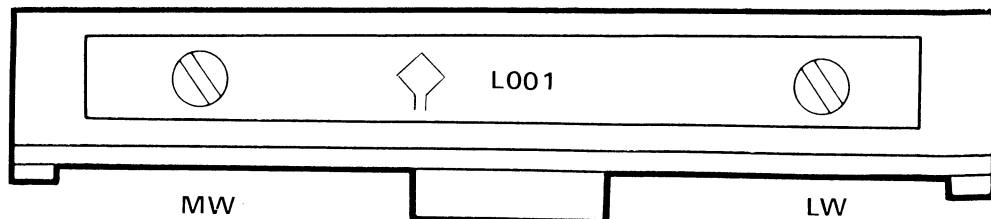


AM Alignment						
		30% mod. 1 kHz 	f			
IF	1	$V_e \approx 10 - 100 \text{ mV}$	450 kHz		T 503	TP 502 Max
MW	2			522 kHz 	T 501	TP 501 1.0 V
	3			 1 611 kHz	TC 503	8.0 V
PO	4	$V_e \approx 500 \mu\text{V/m}$	603 kHz	603 kHz 	L 001 - MW	Max
	5		1 404 kHz	 1 404 kHz	TC 501	
LW	6			153 kHz 	T 502	TP 501 1.0 V
	7			 360 kHz	TC 504	8.0 V
GO	8	$V_e \approx 500 \mu\text{V/m}$	160 kHz	160 kHz 	L0 01 - LW	Max
	9		320 kHz	 320 kHz	TC 502	
	10	$V_e = 1 \text{ mV}$ 	900 kHz	900 kHz 	VR 501	D 607 ~ 611  ON

FM Alignment						
			f			
IF	1	 > 10 mV	10,7 MHz		T 101	TP 203 Max
FI	2				T 201	TP 203 
ZF	3				T 202	
		TP 102				
FM	4			87,5 MHz 	L 104	TP 101 2.0 V
	5			 108 MHz		< 9 V
MF	6	 $V_e \approx 500 \mu\text{V/m}$	90 MHz	90 MHz 	L 101 ~ L 103	Max
	7		106 MHz	 106 MHz	TC 101 ~ TC 103	
	8	$V_e = 1 \text{ mV}$	98 MHz	98 MHz 	VR 201	D 607 ~ 611  ON

Decoder Alignment						
		 $\Delta f = 22,5 \text{ kHz}$	f			
	1	1 mV stéréo	98 MHz	98 MHz 	VR 301	TP 301 f = 76 kHz
	2		98 MHz	98 MHz 	VR 302	Max Separation

REPEAT ALIGNMENT / REPETER CES REGLAGES / ABGLEICH WIEDERHOLEN / REPETIR ESTOS REGLAJES / RIPETERE TARATURE



Deutschland

NORDMENDE Vertriebs-GmbH & Co. OHG

2800 **Bremen 44**
Technischer Kundendienst
und Ersatzteilwesen
Funkschneise 5-9
Tel.: 04 21 / 45 85-1

NORD
2000 **Hamburg 20**
Zweigniederlassung Nord
Hoheluftchaussee 38
Tel.: 0 40 / 42 10 80

1000 **Berlin 15**
Zweigniederlassung Nord
Verkaufsbüro Berlin
Kurfürstendamm 182 - 183
Tel. 0 30 / 88 40 21

2800 **Bremen 44**
Zweigniederlassung Nord
Verkaufsbüro Bremen
Funkschneise 13
Tel.: 04 21 / 45 60 42

3012 **Langenhagen 7**
Zweigniederlassung Nord
Verkaufsbüro Hannover
Berliner Allee 2/4
Tel.: 05 11 / 7 40 00-0

WEST
4300 **Essen 12**
Zweigniederlassung West
Teilungsweg 29
Tel.: 02 01 / 3 19 31

4600 **Dortmund**
Zweigniederlassung West
Verkaufsbüro Dortmund
Olpe 16
Tel. 02 31 / 52 84 07/09

4000 **Düsseldorf 1**
Zweigniederlassung West
Verkaufsbüro Düsseldorf
Adlerstraße 32
Tel. 02 11 / 36 20 40 / 48 / 49

5000 **Köln 1**
Zweigniederlassung West
Verkaufsbüro Köln
Bonner Wall 27
Tel.: 02 21 / 37 20 27/29

RHEIN-MAIN
6057 **Dietzenbach-Steinberg**
Zweigniederlassung Rhein-Main
Karl-Benz-Straße 1
Tel.: 0 60 74 / 4 06-0

3501 **Kassel-Fuldabrück 1**
Zweigniederlassung Rhein-Main
Verkaufsbüro Kassel
Ostring 34
Tel. 05 61 / 58 20 51 / 52

6800 **Mannheim-Neckarau**
Zweigniederlassung Rhein-Main
Verkaufsbüro Mannheim
Fleißwörthstraße 31-33
Tel. 06 21 / 85 30 94

8500 **Nürnberg-Langwasser**
Zweigniederlassung Rhein-Main
Verkaufsbüro Nürnberg
Lübener Straße 26-28
Tel. 09 11 / 8 02 46

6600 **Saarbrücken**
Zweigniederlassung Rhein-Main
Saargemünder Straße 89a
Tel.: 06 81 / 85 45 00

SÜD
8000 **München 46**
Zweigniederlassung Süd
Heidemannstraße 166c
Tel.: 0 89 / 31 63 41

7800 **Freiburg**
Zweigniederlassung Süd
Verkaufsbüro Freiburg
Wöhlerstraße 11
Tel.: 07 61 / 50 80 66

8400 **Regensburg**
Zweigniederlassung Süd
Verkaufsbüro Regensburg
Donaustauer Straße 172
Tel. 09 41 / 4 70 42 / 43

7022 **Leinfelden-Echterdingen 2**
Zweigniederlassung Süd
Verkaufsbüro Stuttgart
Max-Eyth-Straße 3
Tel. 07 11 / 79 70 35-39

Europa

Andorra
AFE-IMPORT / ANDIMESA
4, Plaza d'Andorra
Andorra - La Vella

Belgien
RADELCO N.V.
Italiëlei 179
B-2000 Antwerpen

Dänemark
K. K. Skjød & Co. A.P.S.
Artillerivej 90
2300 København S

England
European Electronics Corp. Limited
Units 8 and 9
Faraday Road - Rabans Lane
Aylesbury Bucks HP 19 3 RY

Finnland
FINNMEDE OY
Takkatie, 10
SF-00370 Helsinki 37

Frankreich
STEV (Service Télévision)
63 A, rue d'Illzach
68100 Mulhouse

Frankreich
SRAMEE
12, Avenue de l'Yser
78800 Houilles

Griechenland
TEVELLAS-NORDMENDE A.B.E.
Lamia National Road
Athen

Irland
Reynolds Electronics Ltd.
Finnabair Industrial Park
Dundaik Co. Louth
Irland

Island
RADIO BUDIN
Klapparstig 26
Reykjavik

Italien
S.E.I.
Via Emilia 52-54
40064 Ozzano Emilia/Bologna

Kanarische Inseln/Spainien
COMERCIAL BOLSUR S.L.
Apartado 784
Santa Cruz de Tenerife
Islas Canarias/ESPANA

Luxemburg
LESSEL FRERES
21, rue Philippe II
Luxembourg

Niederlande
KOELRAD B.V.
Maalderij 19
1185 ZB Amstelveen

Norwegen
FRIGO NORSK, John Bryhn
Bjørnstjerne, Bjørnsonsgate 60
3000 DRAMMEN

Österreich
SDN Unterhaltungselektronik
Vertriebsges.m.b.H.
Laudongasse 29
A-1080 Wien

Portugal
MADUREIRA & SOARES Lda.
Rua Sa da Bandeira 610
Porto

Schweden
SDN Distribution AB
Frövingegatan 14
Box 2044
S-421 02 Västra Frölunda

Schweiz
SEYFFER & CO. AG
Haus zur Europabrücke
Hohlstraße 550
8048 Zürich

Spanien
K. K. Skjød & Co. A.
Rambla Cataluña, 7-9
Barcelona (7)

Türkei
Bekoteknik Sanayi A. S.
Karaagac Cadd. 2/4
Sütlüce-Istanbul

Zypern
Moneta General Enterprises Ltd.
P.O. Box 3969
Nicosia, Zypern

Übersee

Ägypten
A.O.I. - Arab Organization
for Industrialization
P.O. Box 84
Heliopolis - Cairo Egypt

Ägypten
Salem Ouda Salem
NORDMENDE Service Center
56 b Damascus Street
Mohandesin City - Cairo

Algerien
Messrs. SO.NA.CAT
Direction de la Maintenance
87, Boulevard Mohamed V
Alger

Australien
J.B.C. Nordmende
99-105 Queensbridge street
South Melbourne 3205
Victoria, Australia

Hongkong
Forward Intern. Corp. Ltd.
RMS. 2801-4
International Building
141, Des Voeux Road Central
Hongkong

Indonesien
P.T. Central Intone Intern. Ltd.,
P.O. Box 737, Jakarta

Irak
Iraqi Trading Company
P.O.B. 17, Bagdad

Jordanien
JSSA MURRAD & SONS & CO.
Mezdar Street
P.O. Box 6549, Amman

Kenya
BS Mohindra & Co. Ltd.
Mfangano Street, Avon House
P.O. Box 41832, Nairobi

Kuwait
Maseelah Trading Comp. W.L.L.
Canada-Dry-Street,
Shuwaikh Kuwait

Libanon
TELETRADE S.A.R.L.
516 Corniche du Fleuve
P.O. Box 11-0125
Beirut

Libyen
THE GENERAL ELECTRONICS CO.
P.O. Box 2068
Benghazi

Malaysia
Wah Chang Intern. Corp.
P.O. Box 6540 Kg. Tunku
Selangor

Nigeria
Universal Electronics
17/19, Abebe Village Rd. Iganmu
P.O. Box 2391
Lagos

Pakistan
Associated Electronics Ltd.
7, Egerton Road
P.O.B. 353
Lahore

Saudi Arabien
MAHMOOD SALEH ABBAR
P.O. Box 461
Jeddah

Singapore - 7
Forward International
Singapore (Private) Limited
177 F. Selegie Complex
Selegie Road

Sri Lanka
Shamim Group Limited
145, Kynsey Road
P.O. Box 1802
Colombo

Sudan
Sheet Metal Industries Ltd.
P.O. Box 112
Khartoum

Thailand
Vanich NORDMENDE Part,
277, Rachdamri Road,
Bangkok Plaza Centre

Tunesien
Société Générale
d'Electronique
2, Rue Charles de Gaulle
Tunis

Uruguay
Plisol S.A.
Avda. D. Fernandez
Crespo 2117
Montevideo

Vereinigte Arabische Emirate
Allied Electronics Ltd.
P.O. Box 4418 / Dubai
General Enterprises Co.
P.O.B. 289
Abu Dhabi

123

NORDMENDE

SERVICE-CENTER